

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/628,289
		Filing Date	July 29, 2003
		First Named Inventor	GUPTA
		Art Unit	2123
		Examiner Name	Not Yet Assigned
Sheet 1 of 2	Attorney Docket Number	KNS0002-US	
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
3		Apte, V.B. et al., "Stress Distribution in a Packed Bed Above Raceway Cavities Formed by an Air Jet", <u>AIChE Journal</u> , Vol. 36, No. 3, pp. 461-468 (March 1990).	<input type="checkbox"/>
5		Apte, V.B. et al., "Gas Flows in Raceways Formed by High Velocity Jets in a Two-Dimensional Packed Bed", <u>Chem. Eng. Res. Des.</u> , Vol. 66, pp. 357-362 (July 1988).	<input type="checkbox"/>
3	NO DATE	Chong, Y.O. et al., "Operating Mechanism of a Conical Fluidized Bed", <u>Fluidization and Industrial Applications</u> , Chapter 38, pp. 1127-1144.	<input type="checkbox"/>
5		Doyle, III, F.J. et al., "The Phenomenon of Pinning in an Annular Moving Bed Reactor with Crossflow of Gas", <u>Chemical Engineering Science</u> , Vol. 41, No. 6, pp. 1485-1495 (1986).	<input type="checkbox"/>
3		Elliott, J.F. et al., "Physical Conditions in the Combustion and Smelting Zones of a Blast Furnace", <u>Journal of Metals</u> , pp. 709-717 (July 1952).	<input type="checkbox"/>
5		Flint, P.J. et al., "A Fundamental Study of Raceway Size in Two Dimensions", <u>Metallurgical Transactions B</u> , Vol. 23B, pp. 267-283 (June 1992).	<input type="checkbox"/>
10		Hatano, M. et al., "Analysis of the Combustion Zone in the Experimental Blast Furnace", <u>Transactions ISIJ</u> , Vol. 17, pp. 102-109 (1977).	<input type="checkbox"/>
3		Jackson, R. et al., "Shorter Communication Further Consideration of the Effect of Aeration on the Flowability of Powders", <u>Trans IChemE</u> , Vol. 59, pp. 119-121 (1981).	<input type="checkbox"/>
3		Lister, J.D. et al., "Size Hysteresis in a Two Dimensional Model Raceway", <u>The Nineteenth Australasian Chemical Conference Newcastle, Australia</u> , 18 th -20 th , pp. 476-483, September 1991.	<input type="checkbox"/>
7		MacDonald, J.F. et al., "Void Formation in Stationary and Moving Beds", <u>Chemical Engineering Science</u> , Vol. 52, No. 5, pp. 677-691 (1977).	
3		Nishi, Tetsu et al., "Relationship between Shape of Raceway and Productivity of Blast Furnace Taking Account of Properties of Coke Sampled at Tuyere Level", <u>Transactions ISIJ</u> , Vol. 22, pp. 287-296 (1982).	

Examiner Signature	<i>[Signature]</i>	Date Considered	8/21/06
--------------------	--------------------	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/628 289
		Filing Date	July 29, 2003
		First Named Inventor	GUPTA
		Art Unit	2123
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	KNS0002-US
Sheet 2	of 2		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
S	NO	Povermo, J.J. et al., "An Experimental Measurement of Raceway Dimensions in Bethlehem Steel Corporation's Bethlehem, Pa. Plant", pp. 383-401. <i>no date</i>	<input checked="" type="checkbox"/>
3		Sarkar, S. et al., "A Cold Model Study of Raceway Hysteresis", <u>Metallurgical and Materials Transactions B</u> , Volum 34B, pp. 183-191 (April 2003).	<input type="checkbox"/>
3		Sastry, G.S.S.R.K. et al., "Cold Model Study of Raceway Under Mixed Particle Conditions", <u>Ironmaking and Steelmaking</u> , Vol. 30, No. 1, pp. 61- 65 (2003).	<input type="checkbox"/>
3		Sastry, G.S.S.R.K. et al., "Void Formation and Breaking in a Packed Bed", <u>ISIJ International</u> , Vol. 43, No. 2, pp. 153-160 (2003).	<input type="checkbox"/>
3		Szekely J. et al., "A Mathematical and Physical Representation of the Raceway Region in the Iron Blast Furnace", <u>Metallurgical Transactions B</u> , Volume 6B, pp. 119-129 (March 1975).	<input type="checkbox"/>
3		Tsinontides, S.C. et al., "The Mechanics of Gas Fluidized Beds with an Interval of Stable Fluidization", <u>J. Fluid Mech.</u> , Vol. 255, pp. 237-274 (1993).	<input type="checkbox"/>
3		Wagstaff, J.B. et al., "Comparison of Blast Furnace Penetration with Model Studies", <u>Journal of Metals</u> , pp. 370-376 (March 1957).	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature	<i>[Signature]</i>	Date Considered	8/2/06
--------------------	--------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.